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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Peter Gamon Johns

MSX-104(US)

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11/25/2009

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EXAMINER

IP, SIKYIN

ART UNIT

PAPER NUMBER

1793

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/559,092	JOHNS, PETER GAMON	
	Examiner	Art Unit	
	Sikyin Ip	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-27, 32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-27, 32 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities:

Typographical errors are found in [0018] of specification, line 3 "5540C" and line 5 "6400C."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 32 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

32. (New) The alloy of claim 26, wherein below 91.9 wt% of

The limitation "silver a thermal stability of said alloy abruptly decreases, ~~and~~ " in claim 32 is not supported by specification as originally filed.

Applicants argue that support can be found in [0018]. But, support for said limitation cannot be found. Applicants either provide literal support in specification or delete said limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 20-27 and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/095082 (PTO-1449), GB 2355990 (PTO-1449), or USP 6726877 to Eccles.

WO 02/095082 discloses the features including the claimed Ag based alloy (page 1, lines 25-29 and page 11, lines 29-31). GB 2355990 discloses the features including the claimed Ag based alloy (page 2, lines 8-16, page 3, lines 1-10, and page 4, lines 1-13 and 20-23). Eccles discloses the features including the claimed Ag based alloy (col. 1, line 27 and col. 2, lines 55-65). Claimed Cu and Ge contents are overlapped by the alloys of cited references. Therefore, recited Cu/Ge ratio would have also been overlapped. Therefore, when prior art compounds essentially "bracketing" the claimed compounds in structural similarity are all known, one of ordinary skill in the art would clearly be motivated to make those claimed compounds in searching for new products

in the expectation that compounds similar in structure will have similar properties. In re Gyurik, 596 F.2d 1012, 1018, 201 USPQ 552, 557 (CCPA 1979); see In re May, 574 F.2d 1082, 1094, 197 USPQ 601, 611 (CCPA 1978) and In re Hoch, 57 CCPA 1292, 1296, 428 F.2d 1341, 1344, 166 USPQ 406, 409 (1970). As stated in In re Peterson, 315 F.3d 1325, 1329-30, 65 USPQ2d 1379, 1382 (Fed. Cir. 2003), that “A prima facie case of obviousness typically exists when the ranges of a claimed composition overlap the ranges disclosed in the prior art”. Therefore, it would have been obvious to one of ordinary skill in the art to select any portion of range, including the claimed range, from the broader range disclosed in a prior art reference because the prior art reference finds that the prior art composition in the entire disclosed range has a suitable utility. Also see MPEP § 2131.03 and § 2123.

With respect to the alloy property such as resistant to form cracks, fire stain resistance, and formability in claim 20 that are defined in relative terms and conditions which would have been inherently possessed by the alloys of cited references.

Response to Arguments

Applicant's declaration and arguments filed September 1, 2009 have been fully considered but they are not persuasive.

The declaration filed by Charles Allenden is noted. But, all alloys tested have boron content limited to less than 10 ppm, which is much less than the claimed 40 ppm. The scope of the showing must be commensurate with the scope of the claims. MPEP § 716.02(d), In re Tiffin, 448 F.2d 791, 792 (Fed. Cir. 1971), In re Coleman, 205 USPQ 1172, In re Grasselli, 713 F.2d 731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983), and In re Greenfield, 197 USPQ 227. The showing of unexpected results must be occurred over

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the entire claimed range. In re Clemens, 622 F.2d 1029, 206 USPQ 289, 296 (CCPA 1980). General superiority cannot be inferred from the results obtained using a single embodiment of the claimed invention, In re Greenfield, 197 USPQ 227, 230 and MPEP 2144.08 (B).

Moreover, the testes are done under restricted conditions, which are found inconsistent with instant open transitional expression "comprising" in instant claim 20.

~~As shown in the Declaration, as the silver concentration is raised from 93% to 94% there is an abrupt decrease in copper elution, and an abrupt increase in thermal processing stability;~~
Applicant argues that “

Silver Concentration	Elution Rate
93.5%	13.1
94.1%	4.8
95.6%	4.49
96.3%	4.24
97.3%	0.96

But, as shown by Mr Allenden's declaration

Sterling	5.84
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 that the claimed 93.5 wt.% Ag has the highest (worst) elution rate. Said declaration also shown increasing Ag content would increases thermal stability with 0.5% Zn at 93.5% Ag. However, Zn is merely optional in instant claims. The scope of the showing must be commensurate with the scope of the claims. MPEP § 716.02(d), In re Tiffin, 448 F.2d 791, 792 (Fed. Cir. 1971), In re Coleman, 205 USPQ 1172, In re Grasselli, 713 F.2d 731, 743, 218 USPQ 769, 778 (Fed. Cir. 1983), and In re Greenfield, 197 USPQ 227. Nonetheless, GB 990 teaches that heat distortion can be improved by additives such Sn, Sb, Si, and/or In (page 3, lines 4-23).

~~and even as the silver concentration is raised from 95.5% to 96% there is an abrupt decrease in firestain resistance as disclosed in the present patent application. There are hence no surprising~~
Applicant argues that “ But, GB 990, for example, discloses that 92.5 wt.% Ag (page 4, lines 20-23) with Sn would

improve fire stain resistant (page 4, lines 7-13). The discovery of an optimum value of a variable in a known process or product is usually a matter of obviousness for one of ordinary skill in the art. Cf Pfizer, Inc. v. Apotex, Inc., 480 F.3d 1348, 1368 (Fed. Cir. 2007).

Applicant's argument in paragraph bridging pages 5-6 and in pages 7-9 of instant remarks is noted. First, there is no factual evidence to support that recited Cu/Ge ratio is critical. Second, claimed Cu and Ge contents are overlapped by the alloys of cited references. Therefore, recited Cu/Ge ratio would have also been overlapped.

reference WO 02/095082 (Johas is not in practice recommending
Applicant argues that "~~any level of silver above 93%. This certainly not suggesting~~" But, applicant's attention is directed to page 10 of WO 02/095082 pasted below:

The ternary Ag-Cu-Ge alloys and quaternary Ag-Cu-Zn-Ge alloys that can suitably be prepared by the method of the present invention are those having a silver content of at
15 least 30%, preferably at least 60%, more preferably at least 80%, and most preferably at least 92.5%, by weight of the alloy, up to a maximum of no more than 98%, preferably no more than 97%.

certainly no suggestion that there would be any benefit in
Applicant argues that "~~selecting a silver level above 93.5%. Nor is there any~~"

But, applicant's attention is directed to page 4, lines 20-23 of GB 990 below:

For cast silver/copper/germanium alloys with germanium contents of 1.5% to 3%, it is preferable that the silver content is greater than 90% and most preferably, greater than 92.5%, which ranges have been found to be particularly advantageous for good reduction rates when rolling the cast alloy.

Applicant's argument in paragraph bridging pages 8-9 of instant remarks is noted. Applicant's attention is directed to Examples 1 and 2 of Eccles, which disclose Ag 92.5 wt.%.

Applicant's argument with respect to instant claim 32 is noted. Examiner reiterates the same responses above for arguments in declaration.

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Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

The above rejection relies on the reference(s) for all the teachings expressed in the text(s) of the references and/or one of ordinary skill in the metallurgical art would have reasonably understood or implied from the text(s) of the reference(s). To emphasize certain aspect(s) of the prior art, only specific portion(s) of the text(s) have been pointed out. Each reference as a whole should be reviewed in responding to the rejection, since other sections of the same reference and/or various combination of the cited references may be relied on in future rejection(s) in view of amendment(s).

All recited limitations in the instant claims have been met by the rejections as set forth above.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See 37 C.F.R. § 1.121; 37 C.F.R. Part §41.37 (c)(1)(v); MPEP §714.02; and MPEP §2411.01(B).

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Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (571) 272-1241. The examiner can normally be reached on Monday to Thursday from 5:30 A.M. to 4:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Roy V. King, can be reached on (571)-272-1244.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sikyin Ip/
Primary Examiner, Art Unit 1793

November 22, 2009